

# The P2ALERT

Tennessee Division of Community Assistance

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### Denso Manufacturing Achieves Highest TP3 Level

TDEC, The Division of Community Assistance, and the Tennessee Pollution Prevention Partnership is proud to announce that DENSO Manufacturing is the 2nd Tennessee industry to achieve the status of Performer in TP3. DENSO's Tennessee facilities are part of DENSO Corporation's global network of 74 subsidiaries in 29 nations and the fourth largest producer of advanced technology, components and systems for all major automakers. DENSO employs more than 2,900 associates at two Tennessee manufacturing locations, Maryville and Athens. DENSO reached Performer Level by demonstrating commendable EPA compliance; achieving and maintaining ISO 14001 certification; developing a TP3 Plan; implementing multiple pollution prevention projects for air, water, waste and hazardous materials and conducting community environmental outreach projects.

During the TP3 application period, DENSO's activities eliminated the use of 8,610,000 gallons of water and 1,400,000 kilowatts of electricity annually and prevented the generation of an estimated 588 tons of pollution. Specific projects include the following: **developing** and coordinating a consolidated logistics system for 15 DENSO North American companies that prevents the annual generation of 66 tons of nitrogen oxide emissions; **implementing** an energy conservation program to identify and repair

compressed air leaks on equipment and reduce the pneumatic set points of equipment to minimize the amount of compressed air required; **modifying** the wastewater treatment system to allow for the use of a waste acid as a pH adjustment and coagulant chemical. By using the waste acid in a beneficial manner, DENSO eliminated the use of virgin chemicals to perform the pH and coagulant functions. Treatment chemical usage decreased 37% since implementing the acid reuse program and the life of multiple pumps and linings increased significantly. This project prevents the generation of over 81 tons of hazardous waste each year; **replacing** a flammable petroleum distillate-based cleaning solvent with a non-hazardous chemical to prevent the generation of approximately 7 tons of hazardous waste per year; **installing** solenoid switches with conductivity meters in rinse tanks to eliminate the continuous flow of water in rinse baths and save more than 6,000,000 gallons of water per year; **improving** wood, cardboard, plastic and other recycling/reuse programs, including partnering with the McMinn County High School Vocational School on a wood reuse & bluebird house-building project; and **diverting** more than 2,770 tons of materials from Tennessee Landfills in 2002.

Other activities considered in DENSO's application for Performer status included review of their Eco Vision 2005 campaign, efforts towards implementation of Green Purchasing and environmental partnership activities with organizations such as the Blount and McMinn Chapters of Keep America Beautiful and the University of Tennessee Center for Industrial Services. Future pollution prevention plans include the following initiatives: substituting waterborne paints for solvent-based paints in coating activities; and developing a chemical substitution program that will eliminate more than 25 tons of hazardous air pollutants per year by 2005.

Published six times a year, [The TENNESSEE CONSERVATIONIST](#) is dedicated to promoting the mission of the [Tennessee Department of Environment and Conservation](#) to preserve, protect and wisely use the state's natural and cultural resources.

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## K-12 School Awards Criteria Has Changed



For the past eight years, TDEC has recognized public and private schools across the state for their efforts to encourage environmental stewardship and conservation of natural resources. In the past, the K-12 Environmental Awareness Awards have been part of the larger TDEC and Governor's Awards program, recognizing the voluntary efforts of individuals, organizations, businesses, and industries for successful environmental projects, pollution prevention, and lifetime conservation achievement.

The school awards are now under the auspices of the TDEC/Division of Community Assistance, who has created the Tennessee Pollution Prevention Partnership (TP3) Green Schools Program. With this shift in oversight for the awards, there has also been a change in eligibility criteria. Schools who wish to be considered for an award must first be a TP3 Green School member and, secondly, must be at the **Pledge** level or above. More information about becoming a member and moving through levels of the program can be found at [www.state.tn.us/environment/dca/tp3/tp3grschools.php](http://www.state.tn.us/environment/dca/tp3/tp3grschools.php).

Award entries should describe an activity in one of these five project areas:

- Clean air
- Energy efficiency/conservation
- Hazardous chemicals management/reduction
- Land and water conservation
- Solid waste reduction – Reduce, Reuse, or Recycle

Award entries will be judged on the following criteria:

- Participation by the student body
- Participation by the local community
- Innovative approach to the project
- Environmental education merits
- Measurable pollution prevented

Each school may enter projects in more than one area. Public and private elementary, middle, and high schools will compete equally. Five awards will be given statewide, one in each of the above pollution prevention project areas.

We are looking for new projects that have not previously been nominated for a TDEC award. Nominations will be due March 15, 2004. Nomination forms may be found at [www.tennessee.gov/environment/awards/04awds/04k\\_1\\_2.pdf](http://www.tennessee.gov/environment/awards/04awds/04k_1_2.pdf) and a list of **possible projects** can be viewed at [www.state.tn.us/environment/dca/tp3/pdf/projectstable.pdf](http://www.state.tn.us/environment/dca/tp3/pdf/projectstable.pdf).

Questions? Please call Cynthia Rohrbach, TP3 Green Schools Coordinator, at [Cynthia.Rohrbach@state.tn.us](mailto:Cynthia.Rohrbach@state.tn.us) or 931-490-3929

## First Public Ethanol Pump Opens in Nashville Betsy Child, Commissioner

The first publicly accessible E85 pump in Tennessee held its grand opening in Nashville on Tuesday, August 19 at the Citgo station on the corner of Spring and Main streets, just across the river from downtown and the Coliseum. This new pump dispenses a motor vehicle fuel blended with 85% ethanol and 15% gasoline, hence the E85 reference.

E85 represents one of the alternative fuels, such as biodiesel, that are important strategies for improving air quality in Tennessee and reducing our dependence on imported oil. This new availability of E85 for fleet and personal vehicles presents a great opportunity for TDEC staff in our Nashville offices to take specific action steps in "walking the talk" toward cleaner air in Tennessee.

While I am excited TDEC employees now have access to the E85 fuel, I want to make sure everyone understands which vehicles, state fleet or personal, are designed to run on alternative fuels. Vehicles designed to use either gasoline or ethanol or a mixture of the two are known as flexible fuel vehicles. The engines of flexible fuel vehicles contain a sensor that detects the ethanol /gasoline ratio of the fuel being used. Without that sensor, using E85 over a period of time will cause engine and performance problems.

Currently, TDEC has three flexible fuel Dodge Stratus vehicles in our downtown motor pool that are ready for E85, and the Department of General Services has over 200 flexible fuel vehicles in their Nashville motor pool.

Make sure your vehicle is capable of using this cleaner fuel before you pump it into the fuel tank. Check the gas cap or owner's manual to be sure. If you are driving a state vehicle that is ethanol-capable, please make every reasonable effort to refuel with E85, including topping off the tank before returning the vehicle to the motor pool.

I would also encourage you to visit the National Ethanol Vehicle Coalition's website at <http://www.e85fuel.com/> and familiarize yourself with the list of makes, models and engines designed to use E85 as many popular automobile models sold today are flexible fuel vehicles. To learn more about alternative fuels, the U.S. Department of Energy has developed a helpful website on Alternative Fuels at <http://www.afdc.doe.gov/>.

Thank you for all the actions you take to create cleaner air in Tennessee every day.

*Betsy*



## TP3 Membership Status

Pollution Prevention Partnership (TP3) currently has 252 members. Of those, 172 members are Prospects, 71 are Pledges, 7 are Partners, and 2 members, Saturn Corporation and DENSO Manufacturing of Tennessee have achieved Performer Level status. **Congratulations Denso, our newest Performer!**

### Industry

#### Performer

*Denso Manufacturing TN	Maryville
Saturn Corporation	Spring Hill

#### Partner

Daikin Drivetrain Components	Mascot
Delta Faucet Company of Tennessee	Jackson
S E International, Inc	Summertown

#### Pledge

BOS Automotive Products, Inc	Morristown
Bridgestone/Firestone North American Tire, LLC-Warren Plant	Morrison
Carlex Glass Company	Vonore
Dura Automotive Systems, Inc.	Gordonsville
Eaton Corp	Shelbyville
Frito-Lay Inc. – Fayetteville	Fayetteville
Frito-Lay, Inc. – Pulaski	Pulaski
Fulton Bellows & Components, Inc.	Knoxville
General Shale Products Corp	Johnson City
Goodrich Landing Gear Division	Tulahoma
Johns Manville	Etowah
Lodge Manufacturing	So Pittsburg
MAHLE, INC.	Morristown
Maytag Jackson Dishwashing Products	Jackson
MINCO INC	Midway
Pillsbury Company	Murfreesboro
Snap-on Tools	Elizabethton
Standard Gypsum	Cumberland City
Tennsco Corporation	Dickson
Toshiba America Consumer Products, Inc	Nashville
Westvaco Consumer Packaging Division	Cleveland
Windsor Forestry Tools, LLC	Milan

### Business

#### Pledge

AFL Wire Products	Nashville
AWMS, Inc.	Hixson
Colinx, LLC	Crossville
San-Ei Seiko America	Morristown
The Commercial Appeal	Memphis
The Compost Farm	Arrington
Toyota Tsusho America	Maryville
Wellmont Health System	Kingsport

## Government Agency

### Pledge

City of Jackson	Jackson
Columbia EAC	Columbia
Fort Loudon State Historic Area	Vonore
Hiwassee/Ocoee State Park	Delano
Regional Transportation Authority	Nashville
South Cumberland State Park	Monteagle

## School

### Partner

Alpha Elementary School	Morristown
Andrew Johnson Elementary School	Kingsport
Centennial High School	Franklin
Flintville Elementary	Flintville

### Pledge

Bethel College	McKenzie
Bradley Central High School	Bradley
Birchwood School	Birchwood
E.A. Cox Middle School	Columbia
F.C. Boyd Christian School	McMinnville
Fairview Middle School Recycling Team	Fairview
Forrest High School	Chapel Hill
Freedom Middle School - HARD Rock Club	Franklin
Greeneville-Greene County Center for Technology	Greeneville
Hickman County High School	Centerville
Highland Year-Round School	Greeneville
John Sevier Middle School	Kingsport
Lewis County Schools	Hohenwald
Lobelville Elementary School	Lobelville
Macon Elementary School	Memphis
Martin Luther King Magnet School	Nashville
McDonald School - TSAP Club	Mohawk
Meigs South Elementary School	Decatur
Mount Juliet High School Annex	Mt. Juliet
North Greene High School	Greeneville
Soddy-Daisy High School	Soddy-Daisy
St. Ann School	Nashville
Summertown Jr. High	Summertown
Sweetwater High School	Sweetwater
The Farm School	Summertown
Towering Oaks Christian School and Preschool	Greeneville
Upperman High School	Baxter

## Household

### Pledge

Blanton Household	Nashville
Borowski Household	Nashville
Collins Household	Jonesborough
Dugger Household	Nashville
Kinsman Household	Nashville
Smith Household	Nashville

## Organization

### Pledge

Keep Greene Clean  
Kids For A Clean Environment

Greeneville  
Nashville

**CONTACT TP3! The e-mail address for TP3 is [Pollution.Prevention@state.tn.us](mailto:Pollution.Prevention@state.tn.us) and our toll free number is 1-800-734-3619.**



## School Lab Pilot Project Provides Opportunity for Chemical Waste Disposal

The Tennessee Department of Environment and Conservation, under the umbrella of the Green Schools Program, is coordinating a pilot demonstration project for school science labs. The primary objectives of the demonstration project are to:

- collect unknown, unusable, outdated, and potentially dangerous chemicals from one Tennessee school (a Green School Program member) to reduce the potential of accidents or contamination of the local environment
- provide a source of readily available, multi-disciplinary, environmentally sound information and references for school lab chemical management operations in Tennessee schools. The project includes on-site chemical management assistance, chemical segregation, and disposal at no cost to the selected school. The inventory and disposal of chemicals can also serve as a project for credit in the Green Schools Program.
- assess the need for further waste disposal projects in Tennessee schools. The project has been advertised in various forums. The response to this offer may provide a basis for research into grant funding possibilities for future school lab waste disposal projects.

All interested schools are required to complete an application by September 22, 2003. Selection will be made by September 30, 2003. In addition, the selected school will be required to:

- assign a primary contact person;
- complete an inventory of all excess lab chemicals, using the Excel spreadsheet in the Total Science Safety System CD from Department of Education;
- implement a chemical management plan;
- and make a commitment to positive environmental actions by becoming a member of the Tennessee Department of Environment and Conservation's Green Schools program.

The pilot project is a cooperative effort of the Tennessee Departments of Environment and Conservation, Agriculture, and Education, the Tennessee Valley Authority, and Onyx Environmental Inc, with support from the Tennessee Science Teachers Association and other organizations. For additional information contact: Ken Nafe at 615-532-0281 or [Ken.Nafe@state.tn.us](mailto:Ken.Nafe@state.tn.us) or Cynthia Rohrbach at 931-490-3929 or [Cynthia.Rohrbach@state.tn.us](mailto:Cynthia.Rohrbach@state.tn.us).



## Household Hazardous Waste Collection Service Completes First Decade

This year the Tennessee Mobile Household Hazardous Waste (HHW) Collection celebrates its 10<sup>th</sup> Anniversary. The very first event was held in September of 1993 in Rutherford County- 423 people attended. In 1993 there were only five events, but the program took off quickly. The program gained momentum and hosted 47 events in 1994. Now the program is going full tilt with some counties even having two events in a year.

During the decade of operation almost 10 million pounds of waste have been collected for proper disposal. The types of materials that have been safely disposed of include automotive fluids, pesticides, pool chemicals, paints and thinners,



batteries, and mercury. The newest materials that have been added to the program for collection are electronics scrap and fluorescent tubes.

The HHW program is administered by the Tennessee Department of Environment and Conservation and was authorized by the Solid Waste Management Act of 1991. The funding for the program comes from a \$.75 per ton landfill surcharge. In addition to the mobile collection program there are three permanent HHW collection facilities in Tennessee, they are located in Nashville, Chattanooga, and Knoxville. They were constructed with grant money provided by TDEC and receive operating funds from the host city and county and from TDEC.

For more information or a schedule of collection events around the state, please go to [www.tdec.net/dca/hhw](http://www.tdec.net/dca/hhw).



### **Tennessee Department of Environment and Conservation Wins EPA Award for Waste Reduction**

On October 16, 2003, the U.S. Environmental Protection Agency (EPA) will present the Tennessee Department of Environment and Conservation (TDEC) with a WasteWise Program Champion award for implementing a comprehensive waste reduction program. TDEC leads by example, encouraging organizations across the state to adopt similar waste prevention and recycling programs.

In 2002, the Tennessee Department of Environment and Conservation held several collection events for employees to facilitate reuse. As a result, TDEC collected two cases of old cell phones for use in a domestic safety program and 75 coats for needy families. Holiday cards, eyeglasses, and coat hangers were also donated and reused. TDEC's Web page, which is updated regularly, provides waste reduction suggestions such as publishing documents on the Intranet rather than in hard copy format and putting new labels on old file folders. The Tennessee Department of Environment and Conservation encourages employees and the general public to visit this site to obtain ideas.

Recycling is a key component of TDEC's waste reduction program. In 2002 alone, employees recycled more than 1,200 tons of mixed paper. Recognizing that supporting recycling markets for this material is important, TDEC purchases recycled content paper, envelopes, and file folders.

EPA is proud to honor the Tennessee Department of Environment and Conservation for these extraordinary achievements at the WasteWise Annual Meeting and Awards Ceremony. The Tennessee Department of Environment and Conservation is one of only 14 organizations to receive a Program Champion award at this event. The Awards Banquet will be held at the Hyatt Regency Capitol Hill with Commissioner Betsy Child accepting the award for the Department.

The Department of Environment and Conservation has been a member of WasteWise since 1999.

WasteWise is a free and voluntary partnership program launched by EPA in 1994. The program provides guidance and recognition to more than 1,300 participating organizations working to find practical methods to reduce municipal solid waste and improve financial performance.

For more information about EPA's WasteWise program and details about the 2003 WasteWise Annual Meeting and Awards Ceremony, please visit the WasteWise Web site at <http://www.epa.gov/wastewise> or contact the WasteWise Helpline at 800 EPA-WISE (372-9473).

## GreenBriefs

- In 2000, only two of the 53 Tennessee State Parks had formal recycling programs. Since 2000, approximately half of the parks now have recycling programs in place, achieving an astounding 25 of 53. Three parks are now entering their third year of operation. Currently, two more parks are initiating programs, three are expanding their current programs, and one park is moving in the direction of becoming Tennessee's first litter-free State Park. For more information on state parks recycling, please contact Lori Munkeboe at 615-532-0705 or by email at [Lori.Munkeboe@state.tn.us](mailto:Lori.Munkeboe@state.tn.us).
- From January 1990 to July 2003, the State Employee Recycle Program (SERP) has recycled 11,707 tons of mixed office paper. This has generated \$47,063 of revenue for the State while avoiding \$352,000 in landfill costs. For more information about this program, contact George Kesterson at 615-532-0079 or by email at [George.Kesterson@state.tn.us](mailto:George.Kesterson@state.tn.us).
- Solid Waste Directors, Recycling Coordinators, and Keep America Beautiful Coordinators from around the state gathered at the Knoxville Permanent Household Hazardous Waste Facility for a hands-on paint recycling workshop. The attendees learned the basics of reblending household paint for reuse and got a little messy in the process. Everyone at the workshop opened paint cans, verified that the material was latex, checked for spoilage, and decided which color to bulk the paint with. The adventurous attendees tried out the equipment including the pneumatic mixer that turns at 20,000 rpm's, a crown punch paint can opener, and a paint can crusher that crushes 5 cans at a time. There were 20 attendees at the workshop held September 8. For more information about paint recycling and reuse in Tennessee contact Christina Treglia at 615-532-9271 or by email at [Christina.Treglia@state.tn.us](mailto:Christina.Treglia@state.tn.us).



## Calendar of Events

- September 15 - 22 – Pollution Prevention Week
- September 18 - 19 – Keep Tennessee Beautiful Advisory Council Meeting, Smithville, TN
- September 29 - 30 – Tennessee State Parks Managers Meeting, Henry Horton State Park
- October 15 – Tennessee America Recycle Day Kickoff, Pickett State Park
- October 22-24 – Tennessee Recycling Coalition Annual Conference, Knoxville, TN
- November 15 – Celebrate America Recycles Day!

### *Who Do I Call?*

**The P2 Alert**  
**Lori J. Munkeboe, Editor**  
**615-532-0705**

**General P2 Information**  
**615-532-8013 or 800-734-3619**

**TN Pollution Prevention Roundtable**  
**Ron Graham, Director**  
**615-532-0450**

**Environmental Assistance Center**  
**888- 891-TDEC (8332)**

**Recycling/Household Hazardous Waste**  
**615-532-0445**

**Toxics Releases Inventory**  
**Eric Hutton 615-532-0542**

**Small Business Clean Air Assistance**  
**615-532-8013 or 800-734-3619**

**Used Oil Collection Center Hotline**  
**800-287-9013**